Furukawa Robert

From: Louis O'Donnell < > Sent: Monday, August 22, 2016 9:45 AM

To: Furukawa Robert

Cc: '; Patty Finsterbusch

Brian

Subject: RE: Survival: El Faro construction question

Jon,

Answers to you below in red.

Regards,

Louis O'Donnell
Assistant Chief Surveyor – Americas

office mobile

When sending an E-Mail to an individual in the Americas Survey Department please also copy the message to E-Mail address:

From: Furukawa Robert [mailto

Sent: Thursday, August 18, 2016 2:27 PM

To: Louis O'Donnell

Cc: '; Patty Finsterbusch (

Subject: Survival: El Faro construction question

Importance: High

Lou,

The El Faro had a Port Lifeboat diesel powered that was also its rescue boat; and a Starboard Lifeboat that was manually propelled with Fleming gear. Both lifeboats were launched by gravity davits and the crew boarded the lifeboats on an embarkation deck.

The El Faro had 3 liferafts a 6-man liferaft forward and two 50-man liferafts – one aft of the port lifeboat and the other aft of the starboard lifeboat.

Questions: Answers:

Are open lifeboats still allowed? No. [However, see relaxation of this, which was in effect until 01 July 1998.] If not, when was it changed? The 1983 Amendments came into effect for cargo ships constructed on or after 01 July 1986. It did allow that, "Administration may, however, permit cargo ships (except oil tankers, chemical tankers and gas carriers) operating under favourable climatic conditions and in suitable areas, to carry lifeboats complying with the requirements of reg. 43 [Self-righting partially enclosed lifeboats]".

Also note:

"For ships constructed before 1 July 1998, the Administration shall...ensure that when life-saving appliances or arrangements on such ships are replaced or such ships undergo repairs, alterations or modifications of a major character which involve replacement of, or any addition to, their existing life-saving appliances or arrangements, such life-saving

appliances or arrangements, in so far as is reasonable and practicable, comply with the requirements of this chapter. However, if a survival craft other than an inflatable liferaft is replaced without replacing its launching appliance, or vice versa, the survival craft or launching appliance may be of the same type as that replaced."

Are manually propelled lifeboats still allowed? No When was it changed? 1983 SOLAS Amendments Can a new build ship use one of its open lifeboats as its rescue boat or must it use a dedicated rescue boat? No Cannot use an open lifeboat as a rescue boat. The lifeboat used as a rescue boat requires additional equipment and davit hoisting speed is different. When were the changes? The regulation allowing the use of a lifeboat to also be designated as the rescue boat (provided it met the rescue boat requirements), was also adopted by the 1983 Amendments. Are gravity davits still allowed to launch lifeboats? Yes so long as the meet the latest LSA and SOLAS requirements when installed. When was it changed or modified? No change however minor updates in LSA requirements since SOLAS applicable to EL FARO

I understand that lifeboats are to be boarded in the stowed position. Correct When was this change? As adopted by the 1983 Amendments"; see below:

The 1983 Amendments to SOLAS adopted the following regulation for cargo ships:

"Cargo ship survival craft embarkation arrangements shall be so designed that lifeboats can be boarded and launched" directly from the stowed position and davit-launched liferafts can be boarded and launched from a position immediately adjacent to the stowed position or from a position to which the liferaft is transferred prior to launching in compliance with the requirements of regulation 13.5."

Why is there a requirement for a 6-man liferaft forward? SOLAS requires on vessels 100m or greater, see SOLAS III, Reg 31.1.4 When was this implemented/changed? As adopted by the 1983 Amendments; also applied retroactively.

Is it ok for the liferaft to be launched – two men tossing it overboard? Yes, for the 6 man, that is what is envisioned so they could launch from either side forward

Is there any requirement for the liferafts to be launched with a lever that will automatically drop the raft overboard? Refer to SOLAS Chap III, Reg. 31. When was this changed? Liferafts are launched either (1) manually (by removing their lashings and throwing/dropping overboard, (2) hydrostatically, or (3) by davit. There is no SOLAS/LSA Code requirement for liferafts to be launched with a lever.

Hope this helps.

Best regards,

R. Jon Furukawa Investigator + NTSB-OMS + c: From: Young Brian Sent: Tuesday, July 05, 2016 10:28 AM To: Stolzenberg Eric <e >; Bell Caroline <<u>c</u> >; Kucharski Michael >; Furukawa Robert <r Subject: FW: El Faro construction question

FYI BY

Brian Young Office of Marine Safety Sr. Marine Engineer National Transportation Safety Board 490 L'Enfant Plaza, S.W.

Washington, DC 20594-2000 Office Cell From: Louis O'Donnell [mailto **Sent:** Tuesday, July 05, 2016 10:24 AM To: Young Brian < >; Craig Burch < Cc: Erik Garza < Subject: RE: El Faro construction question Let me see what I can do. Might take a few days as I think only have in hard copy and will need to get it in an electronic version. Regards, Louis O'Donnell Assistant Chief Surveyor – Americas office mobile When sending an E-Mail to an individual in the Americas Survey Department please also copy the message to E-Mail address: From: Young Brian [mailto: **Sent:** Tuesday, July 05, 2016 9:17 AM To: Louis O'Donnell Subject: RE: El Faro construction question Lou, Would it please be possible to request the 1973 ABS Steel Vessel Rules? We have the 1975's which were uploaded earlier in the investigation. Thanks very much. Hope you had a good weekend, Brian **Brian Young** Office of Marine Safety Sr. Marine Engineer **National Transportation Safety Board** 490 L'Enfant Plaza, S.W. Washington, DC 20594-2000 Office Cell From: Louis O'Donnell [mailto **Sent:** Thursday, June 30, 2016 8:15 AM To: Young Brian < >; Stolzenberg Eric >; Kucharski Michael <u>v</u>>

>; Erik Garza <

Cc: Thomas Gruber <

Subject: RE: El Faro construction question

Brain,

Apologies for the delayed reply, I'm about a day behind on email from traveling. Steel Vessel Rules for this vessel would be 1973 Steel Vessel Rules. As for CFR's would assume 73/74' CFR, but I would confirm same with LCDR capt. Mauger at the Marine Safety Center to be 100% sure.

Regards,

Louis O'Donnell
Assistant Chief Surveyor – Americas
office
mobile

When sending an E-Mail to an individual in the Americas Survey Department please also copy the message to E-Mail address:

From: Young Brian [mailto:

Sent: Wednesday, June 29, 2016 6:44 AM

To: Louis O'Donnell

Subject: El Faro construction question

Lou,

Hope all is well with you. Busy here. Wondering if you may be able to assist with a historical question about construction dates for El Faro with regard s to rules and CFR's?

According to the Sub website, the Puerto Rico was launched on November 1 1974. Do you know what 'CFR year' would have been used during construction as well as ABS rules?

A bit of a question for Eric and Mike too since they are referring to the rules that the vessel was constructed to for their factuals.

Thank very much, Brian